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(NASA CR-53082)

3p.

② MONTHLY PROGRESS REPORT NO. 6,
Covering Period from January 1, 1964 to January 31, 1964

(NASA Contract NAS 3-2789)

BRAYTON CYCLE SOLAR COLLECTOR

DESIGN STUDY PROGRAM,

Item II. A. 1-2

OTS:PRICE

XEROX

\$ 1.10 ph

MICROFILM

\$ 0.80 mf.

12

ATS

2 282 945

THOMPSON RAMO WOOLDRIDGE, INC.,
New Product Research
Cleveland, Ohio

Project 512-004235-08

② Electromechanical

Edward S. Kovalcik

February 11, 1964
Date

3p. on file

0830
Department

1.0 PROGRESS DURING THE REPORTING PERIOD

The design layout of the recommended Brayton cycle concentrator was completed and submitted to NASA for approval. Fabrication and handling specifications are being finalized.

All computer solutions of the solar reflector performance have been completed. Cavity flux profile computations are continuing. Final performance results and the concentrator performance map will be presented in the design study final report.

Structural and thermal analysis tasks have been completed.

No additional work was performed on the micrometeoroid erosion investigation during this reporting period.

2.0 PROBLEM AREAS AND CORRECTIVE ACTION

Concentrator-receiver performance computations are not yet finalized pending the cavity flux profile results and due to complexity of the analytical procedure for calculating radiant interchange in the cavity. For these reasons and to coordinate with the finalized design of the Brayton cycle receiver study, the combined performance analysis will be extended.

3.0 WORK TO BE PERFORMED DURING THE NEXT MONTH

As shown in the attached task schedule, receiver study coordination (which includes combined collector-receiver performance computations) will be continued.

Comparison reflectivity measurements of tested erosion specimens will be performed as required.

The final report for the overall study program will be prepared.

